Lyman's Grimm ALFALFA



GRIMM ALFALFA

A.B. LYMAN, PROP.

HOW I DISCOVERED THE GRIMM ALFALFA

In 1890 while teaching school some ten miles west of home in Carver county we found the farmers growing alfalfa or "Ewiger Klee" (everlasting clover) they called it. I took a sample of the hay home and showed its superiority over red clover. The following spring my father purchased thirty pounds of alfalfa seed in Minneapolis and seeded two acres in barley and had a good stand. The next summer this cut three heavy crops of hay and there was quite a fourth crop that we did not cut or pasture. In the spring we found the alfalfa all dead. This was a great disappointment and we were at a loss to know why it had winter killed.

Later we found that the Germans still had a perfect stand and upon careful inquiry found that they had suffered no loss whatever. I remember asking one of the Germans in regard to his alfalfa and he replied, "I cut him three times" and when I told him of ours killing he said, "I lose me no one plant."

At this time an article appeared in the Farmers Tribune telling of the great feeding value of alfalfa but it said that alfalfa could not be grown in Minnesota except in Carver County and attributed our success to soil conditions. I read between the lines and formed the opinion that these Germans had a hardy variety. Upon investigation I found that the successful growers were getting their seed from a man named Grimm, while those that planted other seed were not successful. I told many of my discovery but they thought little of it, not realizing the value of alfalfa.

In 1900 I told Prof. W. M. Hayes of our Experiment Station. He took a great interest and the following July accompanied by Prof. Andrew Boss drove out to our place to investigate. They not only examined our fields but the fields of the German farmers in different parts of the county. The farmers were questioned as to where they had received their seed. After a most careful examination Prof. Hayes turned to Prof. Boss and said "This marks the beginning of alfalfa for Minnesota."

In March, 1903, he wrote Press Bulletin No. 20 in which he named this alfalfa Grimm, in honor of the old German that had developed it. Mr. Grimm had begun with 20 pounds of seed he had brought from Germany in 1857. For years he suffered loss by winter killing, but he was persistent and would not give up. He patiently saved seed from the plants that survived. By so doing he built up a hardy alfalfa. As carly as 1904 the Department at Washington became interested in this hardy alfalfa. From Page 25 of the Annual Report of B. T. Galloway, Chief of the Bureau of Plant Industry, we copy the following: "Grimm Alfalfa—Experiments thus far conducted indicate that this is the hardiest variety of Medicago Sativa of which we have knowledge. In an experiment in co-operation with Prof.

L. R. Waldron of Dickinson, N. D., 68 strains of alfalfa, including two Grimm alfalfas of slightly different heritage, were as near as possible subjected to identical conditions and treatment in hill and drill rows. This spring after a winter of normal severity preceded by a moist autumn the winter killing of the 68 kinds was found to range from 3 to 100 per cent. Seven-eighths of the varieties lost over one-half of their stand. Of the nine strains that lost less than half, only two lost less than ten per cent and both of these were Grimm. Farmers of the Northwest are deeply interested in alfalfa and especially in the Grimm. Efforts are being made to establish a Grimm alfalfa seed industry in order to safeguard farmers in making a purchase of seed."

Prof. L. R. Waldron who had this experiment in charge wrote as follows: "We found that the winter divided the alfalfa into two groups. These groups were the Grimm alfalfa and—the others. It is scarcely putting it too strongly to say that it is a public duty that the Grimm alfalfa be increased as rapidly as possible."



Fig. 1. Experimental Plants of Alfalfa in IIIIIs and Drill Rows at Dickinson. North Dakota, Each Row Was Seeded With a Different Strain, 68 Klnds in All. Please Notice the Perfect Stand.

From Page 42 of the Annual Report of the Minnesota Agricultural Society of 1903, we copy the following:

Prof. Hayes: This is a young man I want to make an example of. When Mr. Lyman told me he had discovered this hardy alfalfa, I said to him, "You co-operate with the Experiment Station and I will co-operate with you, and we will give you a reputation as a seedsman." I expect to co-operate in helping Mr. Lyman distribute this seed where it will be used for growing seed. We expect to distribute some of it through the Department of Agriculture that it may be grown in other places and the seed produced even more abundantly than in Minnesota. Ever since I saw those fields and saw the evidence among the Carver county farmers that this was a hardy variety it has been a very interesting matter.

Prof. Spillman, Washington, D. C.: Mr. President, I am glad to see Professor Hayes take the stand that he does. I want to say a word about growing alfalfa seed. I cannot help but be impressed with this paper read by Mr. Lyman this afternoon as of vital importance to the future of agriculture in the State of Minnesota and in the Dakotas. We have been searching the world for a variety of alfalfa that would do just what this variety does * * * The value of that seed represents more than a mil-



Fig. 2. The Same Experiment Illustrated in Fig. 1, one year later. The Two Fuil Rows Remaining Are the Grimm Alfalfa. The About Cuts Were Reproduced from Bulletin No. 185, which can be had by writing Bureau Plant Industry, Washington, D. C. My Grimm was used in this experiment.

lion dollars to the State of Minnesota. The alfalfa plant, according to my estimation, is going to be in the future the most important forage plant on the American continent, unless it is possible corn; within the next fifteen years, if it continues half of its present prosperity, it is going ahead of every other forage plant in this country except corn, and I would not be surprised if some day it exceeded the value of corn. We have been searching for protein to feed our live stock. Now alfalfa is the ideal plant. When you have alfalfa hay you don't have to buy linseed oil cake; in fact cornmeal is worth more than linseed oil cake when you are feeding alfalfa hay. Now that means a great deal to the Minnesota farmers. (Applause.)

Mr. A. B. Lyman,

Excelsior, Minn.

Dear Sir :--

The Grimm alfalfa seed I purchased from you in 1911 has done all you claimed for it; it has stood all tests of cold, heat, drought, heavy rains and deep snow, now for several severe and extreme years.

Dr. A. A. Ashby, Red Oak, lowa.

From Government Bulletin No. 209. By Charles J. Brand, Bureau Plant Industry, Washington, D. C.

Page 21, Bulletin No. 209.

"Recognition of the superiority of the Grimm variety over ordinary alfalfa by Mr. Lyman and through him by Prof. Hayes of the Minnesota Station, marked a third era in the evolution of alfalfa culture in the Northwest."

"The Grimm alfalfa is much hardier than the ordinary kinds obtained from Kansas, Utah and elsewhere, and there is even strong reason to believe that it is the hardiest known form of the cultivated plant. It not only endures extremely low temperatures with or without snow and other adverse conditions, but it can be cut with greater safety late in the fall and will bear more abuse in the way of pasturage than any other plant that has been compared with it until this time. There is some disagreement among investigators as to how Grimm alfalfa obtained its hardiness, but there is no difference of opinion that it is hardy.



Fig. 2. A 2-year-Old Plant of Montana (at the left) Compared With Stand of Grimm Alfalfa of Same Age (at the right). St. Anthony Park. Minn., August, 1909.

"In his annual report in 1907, the Secretary of Agriculture predicted that the further extension of alfalfa growing on large areas is a prize that will be worth hundreds of millions of dollars annually. With due persistence and an intelligent use of present knowledge, the North and Northwest can now begin to collect at least a part of their ultimate share of this prize."

In the fall of 1904, we sold the Bureau of Plant Industry, Washington. D. C., their first lot of Grimm seed. One year I shipped the U. S. Department of Agriculture, twenty sacks of Grimm alfalfa. The next fall, I sold them another load of 4,000 lbs.

Not only have we supplied our Government and Experiment Stations, but we have filled many foreign orders, shipped to Finland, Australia, Argentine and Russia. Have supplied many orders to the Canadian Government. Their reports show that they must have hardy alfalfa. We have received wonderful reports from Russia. They have bought my seed on several occasions and find it much more hardy than their native kinds, also that it will thrive under very dry conditions.

LIMING.

Western land like the Dakotas, Montana, or Nebraska, as a rule does not need liming. This is also true of the larger part of Minnesota. Some soils are acid. Soil can be tested by your Experiment Station, or you can make your own test by using litmus paper which can be procured at any drug store. By placing paper in the soil it will turn a reddish color if soil is acid. Alfalfa will often do well even when the litmus paper shows that the soil is acid. Failures often due to lack of hardiness of variety are attributed



THE GRIMM IN COMPARISON WITH ORDINARY ALFALFA.

This photograph was taken Nov. 1, 1910, by Prof. Philo K. Blinn. Alfalfa Specialist of the Experiment Station at Fort Collins, Colorado Prof. Blinn writes that they are typical plants from their nursery plots, plants grown singly 20 by 20 inches, also that the one plant is 16 inches across the crown and calls attention to the low growing and underground stooling habit. This is the Grimm Alfalfa, the smaller plant is of the same age grown under the same conditions and is typical of the common alfalfa. The Colorado Agricultural College has labeled the one "The Root of Prosperity."

to acidity. No doubt but that some soils need liming. Ground limestone is manufactured in many places in the United States and it can be bought where manufactured at \$1.25 per ton. It should be supplied at the rate of two tons per acre.

METHODS OF SEEDING.

Method of seeding depends largely on locality. On the drier sections it is not safe to seed alfalfa with a nurse crop. In western Minnesota or the Dakotas I would prefer to seed the alfalfa alone during May or June after cultivating the ground for some time to start weed growth.

Here alfalfa is generally seeded with barley, using ten to twelve pounds of seed and three pecks of barley. Where oats are used they should be cut as a hay crop before ripening. July or August seeding is becoming very popular and this is practiced largely throughout the east. An excellent way is to seed alfalfa with a drill. Care must be taken to seed at an even depth and not too deep.

Where common alfalfa is seeded twenty pounds of seed is generally recommended per acre. This is not necessary with the Grimm as it stools more.

If seeded broadcast ten or twelve pounds will seed an acre. With a drill eight would be ample.

TIME TO CUT ALFALFA.

We begin cutting alfalfa when starting to blosson. Where one has a large acreage it will pay to begin cutting before blossoms show. Some begin cutting when the alfalfa begins a new growth at the base of the plants.

WHAT ALFALFA TO PLANT?

Grimm alfalfa is cheaper than common alfalfa as it requires less seed per acre because of its large stooling habit, another reason for requiring less seed in seeding an acre is that the little plants are more persistent in establishing themselves.

Grimm alfalfa is cheaper than common alfalfa because it will hold its stand and not thin out after the first severe winter. Because of its branc's root system it will grow over a hard pan soil, and is adapted to wetter soil than the other alfalfa.

Common alfalfa from South Dakota is no more hardy than common alfalfa from Montana. Both have been winter killed completely, seeded under identical conditions beside my Grimm.

In buying live stock of every kind you are advised to get the best. This rule surely applies to buying alfalfa seed.

Mr. A. B. Lyman. Exceisior, Minn

Dear Sir

Yours of the 10th to hand and earefully noted. The 20 pounds of Grimm alfalfa seed that I purchased from you is doing fine, it is the finest aifaifa I have on my farm. It stood last winter far better than the other alfalfa that I have. The soil I did not inoculate or lime and I have a first class stand. I can recommend Grimm aifalfa and have been recommending it to ail parties who have consulted me in regard to planting aifalfa. What aifalfa I sow from now on will be the Grimm alfalfa. C. K. Sober, Lewisburg, Pa.

WE HAVE THOROUGHLY TESTED THE RELIABILITY OF THE EDWARDS' LEGUME BACTERIA

All the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA. These cultures are manu-

factured by the method originated and successfully followed for ten years at the Ontario Agricultural College and the stock cultures were secured from the Bacteriological Laboratory of that institution. There can therefore, be no question as to their efficiency. The cultures are made according to the best principles of the science of Bacteriology, and special attention is given to keeping up the vigor and nitrogen-gathering power of the bacteria.

THE COST.

EDWARDS' LEGUME BACTERIA cultures are made in two sizes, to inoculate 33, and 60 pounds of seed.

To inoculate 30 pounds, 50c, prepaid.

To inoculate 60 pounds. \$1.00, prepaid.

These prices mean a very low cost per acre, the exact amount depending on the amount of seed sown. The cost is less than to pay freight rates on the soil from a distance, or even to haul it from

Grimm Alfalfa plants from different portions of the same field, those on the right from seed inoculated with Edwards' Legume Bacterla, those on the left from the same kind of seed not inoculated. The ruler is 18 inches long. Notice the stocky growth, the thick sturdy roots, and nodule clusters on the Inoculated plants as compared with the weak growth of the others.

a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures. Full directions are sent with each bottle. We can furnish cultures for alfalfa, sweet clover, red clover and all other legume crops.

SEED GROWING.

The Grimm variety is a heavy seed producer. During the dry seasons profitable crops can be threshed in Minnesota, Wisconsin and as far east as New York. It will seed best where the land is not too rich and the season is reasonably dry.

Some of my customers in the Dakotas and Montana have threshed and sold over \$200 worth of Grimm seed per acre. One man in northern Mon-

tana grew 5,000 pounds for which he received \$3,000. He wrote that he would not have received over \$600 had he grown common alfalfa. You can see that it paid him to seed "Lyman's Grimm."

WARNING AGAINST SPURIOUS GRIMM ALFALFA SEED.

Recent investigations by the Department of Agriculture have revealed the fact that large quantities of ordinary alfalfa seed are being offered for sale under the name of Grimm.

In the cases of some of this seed it was found that it was not even domestic seed, but was wholly or in part imported Turkestan seed. This practice of selling other seed for Grimm results in the farmer paying from 40 cents to \$1 or more per pound for seed which would otherwise sell for from 12 to 20 cents a pound, and inasmuch as the ordinary seed is not as hardy as Grimm, the first severe winter may kill the entire crop.

The original Grimm alfalfa sown in 1858 in Carver County, Minnesota, has undergone a natural cross with the common variety which, together with its exposure to numerous severe winters which have eliminated the weaker plants, has made it one of the hardiest of our commercial strains. The seed was produced originally entirely in Minnesota, but tests of the true variety since grown in Dakota, Montana and Idaho indicate that these lots are all of equal value and are quite as hardy as those grown in Minnesota.

As it is difficult to detect substitutes for Grimm in the seed, the farmers are urged to buy Grimm only from reliable dealers and, as far as possible, to trace the seed back to its source. In many cases the retailers are not deliberately perpetrating a fraud, as they have purchased this seed for Grimm and sell it in the belief that it is Grimm.

This seed has become very popular in regions of cold winters and is now used not only in the Northwest but in the East, particularly in northern New York and New England.—Weekly News Letter to Crop Correspondents, United States Department of Agriculture, Washington. D. C., November 5, 1913.

Mr. A. B. Lyman.

Mllford, 1ll., Feb. 8th, 1916.

Excelsior, Mlnn.

Dear Slr:-

I think every one in this vicinity knows that only Grimm alfalfa will survive the winters in this soil and climate.

Enough other alfalfa has been tried and it is now generally known that western alfalfa will not succeed permanently here.

I cannot understand why people are so apathetic in regard to alfalfa. The worst drawback we find is that it produces so many crops that it is always on hand, like a sore thumb. It has no regard at all for a farmer's convenience when it needs cutting, it just has to be cut.

I have used perhaps 200 pounds of your seed and have always got a stand. It has never winterkilled.

Respectfully yours,

DR. O. O. HALL.

In the spring of 1912, Prof. L. A. Klink of Macdonald College bought 500 pounds of my Grimm.

On Nov. 20th, 1914, R. Summerly, Lecturer in Cereal Husbandry, wrote me as follows:—I have your letter of November 10th, addressed to Prof. Klink. He has taken a position as Dean of Agriculture at the University of British Columbia.

With regard to the Grimm seed purchased from you some years ago by this Department, our experience has been that your alfalfa is by far the hardiest of any alfalfa that it was possible to purchase on the market. I am



"Lyman's Grimm" at Macdonald College, Ste. Anne de Bellevue, Que., Canada.

sending a photograph of Grimm alfalfa from you, along side of thirteen commercial samples. You will see that it is much hardier than the others. Out of 88 varieties and strains of alfalfa, "Lyman's Grimm" was amongst the few that came through the winter of 1912 and 1913, a very severe winter.

In another section of our experimental grounds, a half acre block of this alfalfa came through where Mammoth Red Clover, Medium Red Clover and Alsike Clover in similar adjoining blocks winterkilled. We are advising the use of Grimm seed whenever it is possible to get it for the Province of Quebec." Three of my customers won large cash prizes put up by the Saskatchewan Government. These fields had to pass through at least three winters and had to contain not less than twenty acres before they could compete. Following are the names of men who planted Lyman's Grimm carrying off first, second and third prizes, respectively:

R. M. Johnson of Eastview, Sask., won first prize of \$500.00. Rackham & Smith of Loydminister won second prize of \$400.00, while Ed. Sworder of Balcarras won third prize of \$300.00.

Mr. A. B. Lyman.

Excelsior, Minn.

Dear Slr:→

Your Grimm alfalfa is being tested in Canada, wherever tests for hardiness are conducted and is proving a valuable strain.

JNO. R. DYMOND,

Seed Analyst, Ottawa, Can.

THE WHITE ADDING MACHINE CO.

CHAS. M. JARVIS.

First Vice-President.

York and Grove Streets

Mr. A. B. Lyman, Prop., New Haven, Conn., June 13th, 1914.

Alfalfadale Farm, Excelsior, Mlnn.

My Dear Mr. Lyman:--

In 1911 I sowed about a quarter of an acre of land, half with your Grimm Alfalfa and the other half with ordinary alfalfa. During the crop year of 1912 and 1913 I noticed no appreciable difference in the yield between the two varieties. During the past winter, owing to severe sudden changes in the weather nearly all of the alfalfa in New England killed out. In the quarter acre referred to above the Grimm Alfalfa looks beautiful—as fine a piece of alfalfa as I have ever seen but the other half sowed with the ordinary seed is from twenty to forty per cent winterkilled. The line or demarkation between the two pieces is very clear and distinct. This proves conclusively to my mind, and I have been growing alfalfa for ten years, that Grimm is the only variety that will stand our New England climate and hereafter I shall sow nothing but Grimm. Enclosed please find order for 100 pounds to be sh'pped at once to me at Berlin, Conn., by express.

(Signed) Chas. M. Jarvls.

Mr. A. B. Lyman. Excelsior, Minn. Brookings, S. D., November 19, 1914.

Dear Sir:-

In reply to your letter of November 11th, I would state that we are growing Grimm alfalfa on all the farms of the South Dakota Experiment Station and that we use It as a standard by which we measure the value of other varieties. It is hardy at all points where we have experimental farms.

(Signed) Mauley Champlin.

Assistant Agronomist in Charge of Field Experiments,

Mr. A. B. Lyman,

Excelsior, Minn.

Dear Sir:-

You will no doubt be gratified to know that your seed has given me a very heavy stand of the finest alfalfa. I have been experimenting with various alfalfas for the last 3 years, and I now propose to seed land to Grimm as fast as I can put it in sultable condition.

J. W. G. WALKER.

Brownfield, Maine, P. O. Centre Conway, N. H.

Mr. Stevens writes me as follows:—"This is one of our Grimm alfalfa plats seeded two and one-half feet apart on the hardest kind of volusia silt soil, a soil that our experiment stations said would not grow alfalfa. I am more than pleased with your seed and look forward to a decided increase of your variety as a result of these tests."



"Lyman's Grimm" Planted by F. R. Stevens, Agriculturist, for the Lehigh Valley R. R., of Geneva, N. Y.

M. E. Chubbick, the Farm Bureau man, of Herkimer, N. Y., sent me a photograph showing my Grimm a perfect stand while Grimm (?) from another source had killed completely the past winter.

Mr. A. B. Lyman, Excelsior, Minn.

LeRoy, N. Y., Nov. 27th, 1911.

Dear Mr. Lyman :--

In answer to the questions regarding the Grimm alfalfa in your letter of the 11th, will say that the 20 pounds of seed I had of you in 1912, I sowed on July 8th at the rate of five pounds per acre. I sowed it with a grain drill, drills 7 inches apart and run them very shallow., I had prepared the land very carefully and applied one ton of lime per acre and inoculated it with about 300 pounds of soil from my old alfalfa field and gave it a good top-dressing of manure.

I secured a good stand and this year, the second year of cutting, I secured fully as much hay per acre as from common alfalfa sown under the same conditions at the rate of 20 to 25 pounds of seed. It branches more and is more leafy than the common alfalfa and is about one week earlier in coming into bloom. The bloom was very much heavier than on the common, and varied from white and yellow through all the shades to very dark purple and black.

Very respectfully yours,

(Signed) F. P. Hazelton,

The following photograph by Louis Klass of Maple Park, Ill., tells the story better perhaps than any one else that has written me.



"A SURVIVAL OF THE FITTEST."

This picture was taken June 11, 1912, on the Pierce Center Stock and Dairy Farm and represents an alfalfa field. The part in the background was sown in the fall of 1909 and the part in the foreground in 1911 to common northern grown seed-both were winter killed last winter. The central and remaining portion was sown in 1910 to Grimm's Hardy Seed seemed from A. B. Lyman, Excelsior, Minn., and is a thrifty survivor of the severe freezing of last winter, the only possible factor of influence -Louis H. Klass, Maple Park, Ill. being that of variety.

Mr. A. B. Lyman, Excelsior, Mlnn.

Millston, Wis., Jan. 1915.

Dear Sir:-

Your letter, inquiring as to the results of the Grimm alfalfa seed Lought of you in 1911 and 1912, received. Will state that I sowed good common Montana seed each year I sowed yours. The Montana seeded fields killed out the winters following, with no loss to your Grimm alfalfa, although ice stood six inches thick on one spot for six weeks.

Out of seventeen fields of alfalfa seeded near my farm, twelve were Montana grown seed, which all winter killed; two were seed of unknown origin, one commereial Grimm and two fields seeded to your Grimm. All these fields have been plowed up, owing to poor stands, except the fields seeded with your Grimm seed. "They have made good."

I consider your seed cheap at any price for our soll and climate. In fact, I would not sow any other seed even if given to me, as I would consider It time and work thrown away.

Yours very truly.

(Signed) E. M. Ivey.

Mr. A. B. Lyman,

P. O. Niverville, N. Y., August 17, 1915.

Execlsior. Mlnn.

Dear SIr :-

Kindly ship me at once 50 pounds of your Grimm alfalfa seed. I had 100 pounds of you last year and planted it with great success. There is not a weed in the field and not one plant winterkilled. It was well worth the money I paid for it.

Very truly yours,

(Signed) T. W. Barnes,

Mr. A. B. Lyman, Excelsior, Minn.

Enosburg Falls, Vt., February 8, 1916.

Dear Sir :-

Re yours of February 4th would say I had fine success with your Grimm alfalfa and it is the only alfalfa seed I have been able to grow here. Have cut same for four years now, three crops a year. Am planning to use more of it this coming spring. Would not think of using auything but your Grimm seed.

Yours truly,

V. A. Irisb, Maplewood Farm.

Mr. A. B. Lyman, Excelsior, Mlnn.

Dear Sir:-

We have planted a small aereage of your Grimm alfalfa each of the past 3 years and it has given us perfect satisfaction. Our first planting of Grimm alfalfa was made 3 years ago with seed that cost \$1.00 per pound, we got a perfect stand at less expense than our neighbors who planted 15 pounds per acre of the ordinary variety and we have alfalfa we feel certain will not freeze out, while the other fellows is about gone, a little each winter.

Lake Sarah Specialty Farm, Rockford, Minn.

Mr. A. B. Lyman,

Excelsior, Minn.

Dear Slr:-

Recently I received a letter inquiring about the 15 pounds of Grimm alfalfa. which I received from you last year. Half of this field was seeded in with your Grimm and the other half was seeded in with a Hardy Montana. Special care being taken that both seeds should be grown under identical conditions. Both fields showed good stands in the fall. The Grimm heing somewhat finer and not as course as the Montana. After a bard winter (fully half of our clover crop being frozen out and the ground covered with ice much of the time because of the midwinter rains), we hardly hoped to see any of the Alfalfa in the spring. The Grimm came up with a good stand and the hardy (?) Montana was entirely winter killed.

E. P. Esal, Cashier, Peoples State Bank, Augusta, Wls.

Mr. A. B. Lyman, Excelsior, Mlnn.

Dear Sir :-

Experimental work conducted by the Department of Agronomy of New Hampshire Experiment Station seems to indicate that hardy alfalfa preferably your Grimm, is the only kind that can be depended on to withstand our winter conditions.

John B. Ahbott, Durbam, N. H.

County Agent, Dept. of Agriculture, N. H. College of Agriculture.

Mr. A. B. Lyman.

Excelsior, Minn.

Dear Sir :-

Replying to your inquiry as to the condition of my fields seeded with Grimm alfalfa seed, purchased from you, I wish to say that they are in splendid condition. I know of no alfalfa in my section of the state where as good a stand has been secured and as vigorous a crop has been obtained, as that which I seeded with Grimm alfalfa purchased from you. One field has been in now 4 years, and last year's crop was as heavy as the first cutting from the field. It is a pleasure to me to recommend the Grimm alfalfa seed grown by you as heing the very best that can be purchased in my opinion for use in Minnesota. It is very important that one purchasing alfalfa seed should be sure that the real Grimm alfalfa seed, such as you raise, is obtained.

M. D. Munn. Pres. The American Jersey Cattle Club, St. Paul. Minn.

Mr. A. B. Lyman, Exceisior, Minn.

Dogr Sir :-

I am going to volunteer the helief that your Grimm alfalfa is the thing for our climate of alternate freezing and thawing. Two acres of Grimm sown last fail ou my farm at Arcola have wintered spleudidly and showed no upheaval; while 4 acres of ordinary seeding right heside it suffered badly. In a 4-year-oid plot of ordinary alfalfa in the same field, alfalfa roots 18 inches long were upheaved by the alternate freezing and thawing, and lay flat on the ground.

Irvin P. Knipe, Attorney-At-Law, 5 E. Airy St., Norristown, Pa.

Mr. A. B. Lyman, Excelsior, Minn.

Dear Sir:-

Your Grimm seed has been uniformly satisfactory. That planted in 1915 made a good stand before winter and we are making our first cutting now-almost exactly one year after it was seeded. The stand is perfect and the crop very heavy.

George T. Siade, Vice-Pres., Northern Pacific Railway Co., St. Paul, Mlnn.

Mr. A. B. Lyman. Exceisior, Minn.

Dear Sir:-

I am proud of the Grimm. I think it is the stuff and I will hang to it.

N. A. Mershon, New Hampton, Iowa.

Replying to your letter of Jan. 28th, asking for the success I have had with Grimm aifalfa. Some 7 or 8 years ago, I purchased 10 pounds of Grimm alfalfa seed, and sowed it in the field by the side of some sand lucern 1 got from the Department of Agriculture, and also some northwestern alfalfa seed. You will probably be interested to know that the Grimm alfalfa is outlasting the other varieties.

Colon C. Lillle, Coopersville, Mich.

Your seed proved to be very good, germinating very quickly and gave a most excellent stand. Your Grimm seems to be the only variety that stands our New England winter. Another feature in favor of it is that this 3 acre lot had not raised a profitable crop up to this time of seeding, being what we call light with a sandy subsoil, sensitive to drouth.

S. O. Barnes, Greenville, R. I.

PROPOGATION FIELDS.

I became interested in growing Grimm seed through Prof. W. M. Hayes in 1900. What Grimm fields there were then were largely in our neighborhood, Carver county, Minnesota, and I soon found that it would be necessary to have fields at other points in order to have seed each year.

In 1906 I started seed fields in northern Montana from Minnesota seed that I had planted for me under a seed contract. I have gradually increased these fields and have taken no chance on my seed being mixed with other alfalfa. I have visited these fields twice each summer and have often been present when same are threshed. If I am not there, I have a man present whose duty it is to seal the sacks.

I now have seed fields in the Dakotas and Montana, and feel certain of having a supply each season. As I have a record of the seed used in planting each field, I can trace the history of each stock right back to some Carver county farmer that has true Grimm seed. Remember if the seed can not be traced to Carver county, Minnesota, it has no claim whatsoever to the name Grimm.

I furnish each customer with an AFFIDAVIT certifying that the seed supplied is genuine Grimm Alfalfa.

PRICES

Lb. postpaid, 90. Not prepaid, 10 lbs., \$8.00; 20 lbs., \$15.00; 30 lbs. and over 70 cents per lb.

We ship in scaled sacks. Our alfalfa shows a purity test of 99 per cent and over. If you find that it contains any seed or Dodder, Quack grass. Canada thistles, sow thistles, you can return same at our expense and we will cheerfully refund your money.

A. B. LYMAN Excelsior, Minnesota

PROPRIETOR OF ALFALFADALE FARM

21/2 Miles South of Excelsior. Both Phones.

You Are Invited to Alfalfadale Farm.

Phone us and we will meet you at street car line.

References-

Dunn, Bradstreet, and the Minnetonka State Bank, Excelsior, Minn.